Program for Annual Meetings

Wednesday, January 15, 1941
Lord Baltimore Hotel
Baltimore, Maryland

Morning Session

10:00 Call to order----------Pres. H. J. W. Rayner
Vegetable Research Program, Dr.C.H.Mahoney,
University of Maryland.

Spinach Variety Tests

The Spinach Cutting Machine Demonstration,
Discussion led by H. B. Derrick,
County Agent, Towson, Maryland.

Marketing Anne Arundel Canteloupes

Present Status Market Facilities in Baltimore
Discussion led by Stanley Day,
County Agent, Annapolis, Maryland.

Report of Committies

Recess

Afternoon Session

2:00 Cooperation with Northeastern Potato and
Vegetable Council,
Discussion led by F. Ridgely Todd
Sparrows Point, Maryland

New Methods of Applying Fertilizer---------
Colored movies.

What Can Modern Packaging Accomplish for
Fresh Vegetables?-----Glenn Mather
Marketing Service Corporation

Report from Horticultural Council

News Letter

Issued by
The Maryland Vegetable Growers Association
W.R. Ballard
Secretary-Treasurer
(1)

Vol. XVIII, No. 1 College Park, Maryland January 1941

The Annual Meetings. Icy weather at the time of the meeting kept the attendance down but the interest manifested by those who came was very good. Among the subjects discussed were: spinach variety tests, cutting machine demonstration, marketing Anne Arundel cantaloupes, terminal marketing facilities in Baltimore, cooperation with the Northeastern Potato and Vegetable Council and what can modern packing accomplish for fresh vegetables; another feature of interest was a movie in color depicting "New Methods of Applying Fertilizers."

Representatives from other horticultural interests in the state met with the vegetable growers and after hearing reports relating to the legislative program, a motion was made by G. Wm. Gardner, seconded by Joe Merritt that the budgets be combined and that representatives from each horticultural group meet with the Executive Committee of the Farm Bureau to present a unified budget to the legislature. Motion carried.

Mr. R.T. Merritt moved that delegates from the various horticultural groups meet annually. This was amended to call the organization the Horticultural Council and to continue the temporary chairman, F. Ridgely Todd. Motion carried. The delegates then withdrew for further consideration of the legislative program.

The Resolutions committee presented the following resolutions which were endorsed by the association.

Resolutions of the Maryland Vegetable Grower's Association to The Maryland Farm Bureau, Inc.

Food Stamp Plan:

We endorse the broad humanitarian objectives of the Stamp Plan for disposing of agricultural surpluses and its continuation and extension to include towns and cities in Maryland not being served at the present time.

Direct Surplus Purchases:

Baltimore markets having not materially benefited from the Direct Purchase Program to date and particularly during the peak seasons of certain local fresh fruits and vegetables our market often becomes unnecessarily depressed, by minor surpluses and direct purchases at the proper time would have a tremendous stabilizing effect. Therefore, we urge that immediate steps be taken by the proper officials to designate the Baltimore market as a purchase point for perishable products in distress.

Baltimore Market:

In view of the chaotic condition of the vegetable industry and diminishing returns to growers; and due to the high pressure merchandising program of certain distribution agencies handling fruit and vegetables, it becomes necessary that steps be taken to bring about organization and coordination of effort among Maryland Producers. It has become further necessary that there be better cooperation and coordination of effort on the part of Maryland Producers with producers in other states. Therefore, it is urged that the State of Maryland include an appropiation of $7,500.00 to the supplemental budget, specifically designed for the promotion and development of the Maryland fruit and vegetable industry.

We urgently request that the Maryland Farm Bureau appoint a special committee to confer with the Governor on this particular appropriation and some means be worked out whereby funds are available to start work not later than May 1st, 1941.

Representation:

The Maryland Vegetable Growers Association continues to send represenatives to the Northeastern Potato and Vegetable Council and ask the Maryland Farm Bureau to continue their financal support.

The treasurer's books audited by Wm. G. Lynch shows a balance on hand as of December 31,1940 of $105.05.

The following officers were elected by the Association:

President - H.J.W. Rayner, Salisbury
Vice-President - Clay Whiteford, Whiteford
Secretary-Treasurer - W.R. Ballard, College Park
Director (for 3 years) - C.C. Phillips, Quantico
Director for Farm Bureau - George H. Strattman, Sparrows Point
Delegate to Farm Bureau - Egbert Hawkins, Harmons
Director for Agricultural Corporation - Wm. G. Lynch, Dundalk

TENTH ANNUAL MARYLAND WHITE AND SWEET POTATO SHOW

Lord Baltimore Hotel, Baltimore, Maryland, January 14-15, 1941

Sponsored by the

Maryland Farm Bureau Federation and Maryland Vegetable Growers Association

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Regulations

Each exhibit shall consist of sixteen potatoes. Only one exhibit may be entered in any class.

No entry fee will be charged. One dollar membership fee will be subtracted from premiums of all exhibitors in adult classes who are not members of the Maryland Vegetable Growers Association. Prize winners in the Junior classes will be made honorary members of the Maryland Vegetable Growers Association.

Exhibits may be entered only by the grower and owner of the field in which the tubers were produced.

Exhibits should be sent by prepaid express or parcel post to the State Potato Show, Lord Baltimore Hotel, C/O Dr. R. A. Jehle, Baltimore, Maryland, and should arrive not later than January 14th. Judging will begin at 10:00 A. M. on January 15th so it is necessary to have the potatoes at the hotel before that time.

Arrangements for the return of the exhibits must be made by the exhibitors; otherwise, the exhibits will be disposed of by the Maryland Vegetable Growers Association.

Group I - Adult Certified

Open to all potato growers in Maryland who have produced seed potatoes eligible for certification. Exhibits must be selected from potatoes grown in fields which have passed all certification requirements of the Maryland Seed Certification Board in two field inspections.

		Premiums
Class I.	Irish Cobbler	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class II.	Smooth Rural (Mason, Rural New Yorker, Mill's Prize, Pioneer Smooth Rural, etc.)	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class III.	Russet Rural	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class IV.	Dakota Red	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class V.	Any Other Variety Variety must be designated.	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class VI.	Sweet Potatoes, Any Variety Variety must be designated.	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.

Group II - Adult Commercial

Open to all potato growers in Maryland.

		Premiums
Class VII.	Irish Cobbler	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class VIII.	Smooth Rural	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class IX.	Russet Rural	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class X.	Dakota Red	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class XI.	Any Other Variety Variety must be designated.	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class XII.	Sweet Potatoes, Maryland Golden Sweet	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.
Class XIII.	Sweet Potatoes, Any Other Variety Variety must be designated.	1st. $4.00; 2nd. $3.00; 3rd. $2.00; 4th. $1.50; 5th. $1.00; and 6th. $1.00.

Group III - 4-H Club Certified and Commercial

Open to all 4-H Club members listed in the State Office who had potatoes for their project.

Class XIV.	Early Varieties (Irish Cobbler, Warba, Bliss Triumph, etc.) Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; and 6th. Ribbon.
Class XV.	Medium Late Varieties (Green Mountain, Katahdin, Chippewa, etc.) Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; and 6th. Ribbon.
Class XVI.	Late Varieties (Rurals, Dakota Red, Sequoia, etc.) Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; and 6th. Ribbon.

Group IV - F. F. A. Certified and Commercial

Open to all F. F. A. members who have potatoes for their project.

		Premiums
Class XVII.	Early Varieties (Irish Cobbler, Warba, Bliss Triumph etc.) Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; and 6th. Ribbon.
Class XVIII.	Medium Late Varieties (Green Mountain, Katahdin, Chippewa, etc.) Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; & 6th. Ribbon.
Class XIX.	Late Varieties (Rurals, Dakota Red, Sequoia, etc.) Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; & 6th. Ribbon.

Group V - 4-H or F. F. A. Certified or Commercial

Class XX.	Sweet Potatoes, Any variety Variety must be designated.	1st. $3.00; 2nd. $2.00; 3rd. $1.50; 4th. $1.00; 5th. $1.00; & 6th. Ribbon.

(11/6/40)

News Letter

Issued by
The Maryland Vegetable Growers Association
W.R. Ballard
Secretary-Treasurer

Vol. XVIII No. 2 College Park, Maryland February, 1941

N.E. Vegetable and Potato Council

At the January meeting considerable concern was expressed regarding the carrot situation. Philadelphia reported a 75,000 bushel surplus. There is need of educating retailers as to how to take care of vegetables for keeping their quality as well as educating consumers as to how best to cook them.

Sales efforts are meeting with some success and favorable reports from retailers indicate progress is being made with special commodities.

Interest in the use of carrots for juice was expressed. Production for this purpose and the question of best varieties were considered. The use of carrots in school lunches was discussed as a real opportunity for developing consumption of foods as it is aimed to have 6,000,000 children on the program during the coming year. The free lunch development may be one of the steps in the trend away from individual responsibility both in business and family affairs. This statement raised the whole question of individual responsibility or the trend away from the individual. References were made to Milo Perkins' article in December Harper's Magazine and to the January Readers' Digest .

The potato situation was next discussed. The Connecticut Council presented the following resolution:

"The Connecticut Agricultural Council is much disturbed by the desperate situation the potato growers are facing. Theyurge the Connecticut members of the N.E. Vegetable and Potato Council to use their best efforts to get that organization to interest itself in devising ways and means for relieving this situation by moving the potatoes now in storage."

It is estimated that the surplus in Connecticut is nearly a million bushels. It was pointed out that the diversion program advised by Washington had not been followed too closely. The acreage figures of the Crop Reporting Service for Connecticut were thought to be too high. After considerable discussion a committee drew up the following resolution:

"Whereas the present potato marketing situation is in a critical condition, and

Whereas the present price due to the abundant supply is exceedingly low, and

Whereas stocks are not moving and growers are fearful of a further demoralizing price break in Connecticut valley.

Be it resolved that the N.E. Vegetable and Potato Council hereby respectfully request immediate relief through a direct purchasing program by the Surplus Marketing Administration."

The resolution was passed.

A suggestion from Porter Hardy, of Virginia, that some control measure, marketing agreement , or at least some definite action for this year's potato crop be taken was referred to the Potato Committee.

The program for the coming season was put into the hands of a committee to report at the February meeting.

The wage-hour law and its effect on agriculture was discussed. The labor situation is likely to be a problem this season, and it was suggested that a WPA representative be invited to discuss the relation of this organization to agriculture at the February meeting.

Bulletin Revised

Extension Service bulletin No. 70, The Small Vegetable Garden, has been revised and reprinted. Campaigns are under way in several of the counties to stimulate greater interest in the home vegetable garden, and there is considerable demand for this bulletin. Dietary studies in recent years have emphasized the need of more vegetables in the diet. It apparently is not enough to have plenty to eat - it must be of the right kind and varied enough to supply the body with all needed nutrients.

What of the Future?

Under the title "Adjustments in Maryland Agriculture to Meet the War Impacts", Dr. S.H. DeVault has just issued a report which should be of interest to vegetable growers. The following quotations are from this report .

"This (expenditures for defense) will increase employment and consumer purchasing power, which will in turn affect the demand for, and prices of, important agricultural commodities. It will not affect all agricultural areas and all commodities the same. The eastern part of the United States, including Maryland, is in a relatively favorable position. The greatest demand will be for domestically consumed products. It is estimated that farm income in 1941 will be at least 9,600,000,000, an increase of about 8.5 per cent over the 1940 income."

"Some of the major problems facing agriculture now, or in the future, are as follows:

(1) Prices of raw materials and manufactured products will advance.

(2) There will be an increase in production and living costs and increased competition from other regions. Some family living items, the prices of which are expected to be higher , are: Silk, woolens, worsted yarn material, ready-to - wear clothing, toilet articles, cigarettes, theater tickets, furniture and furnishings, building materials, automobiles, tires, tubes and taxes.

(3) Farm wages are expected to advance as farm labor is conscripted or finds industrial employment. Increased industrial activity will stimulate the flow from the farm to the city; conscription will take 150,000 people from the farms in 1941; net migration from farms will amount to about 350,000 between 1939 and 1942. The farm population, which has increased in recent years, will be checked and will probably show a decrease after 1941."

On January 1,1941, the increase in demand for farm labor amounted to 3 per cent. There was a reduction in supply of 13 per cent. The situation will be worse next spring. "What adjustments should be made in the vegetable and canning crops industries to meet the impact of the war?

NEWS LETTER

Issued by
The Maryland Vegetable Growers Association
W.R. Ballard
Secretary-Treasurer

Vol. XVIII, No. 3 College Park, Maryland March, 1941

Fresh Produce For the Army

It is expected that the army will be placed on field rations about May 1st. With 1,500,000 men in the field it is estimated that it will cost approximately "235,000,000 a year to feed them. Of this amount 35,000,000 will be spent for fresh fruit and vegetables. The supplying of this amount of food will be of considerable interest to growers of vegetables. In order to take advantage of the situation, the grower must know what is needed and must conform to the system set up to administer it.

There will be set up shortly 30 purchasing centers. Information concerning these will be available later. Growers should get in touch with the nearest purchasing agent and get information as to vegetables needed and required quantities, grades and packages. The growers should keep purchasing agents informed of crops grown and approximate date when they will be available. Purchases will be made by bids, and while all purchases will be handled by the regional offices deliveries will be made to designated camps.

Growers must either be prepared to furnish volume required or cooperate with other growers to this end.

"The important thing to bear in mind is that all purchases will be made on Army specifications, which are based on established Government grades. These specifications will be flexible enough to meet general growing and marketing conditions. General publicity will be given them so that any bidder may know beforehand what they are on any given purchase."

"Naturally, the matter of surplus crops is going to come in for a good deal of consideration. It is obvious that it will be to the advantage both of the Army and of the produce industry for the Army to buy in the surplus market wherever possible. When surplus conditions arise, and prices are demorialized as a result, the Army will try to vary its ration so that it can make additional purchases of surplus commodities, thus relieving the glutted market conditions."

Growers should familiarize themselves with the set-up, get acquainted with the men in charge, make suggestions or criticisms as they may seem justified and help in any way possible to further the project. The prospects are that considerable new business will come to those who put themselves in a position to avail themselves to it.

Boron Deficiency

Studies made by the Virginia Truck Experiment Station and reported in Bulletin 105 indicate that certain Virginia soils need applications of borax to correct boron deficiencies. The summary is given here but any grower specially interested should get the entire report.

Summary

Boron deficiency, as evidenced by growth response to applied borax, or the appearance of malnutrition symptoms in plants, has been found to effect at least sixteen vegetable crops grown under field conditions in Eastern Virginia.

Results of field tests are presented, showing that applications of borax in several areas have resulted in increases in yield, or quality, with a majority of the vegetable crops grown in Eastern Virginia.

Although certain of the light Norfolk soils have been found to be extremely deficient in boron, this condition is not general with the majority of the trucking soils of Eastern Virginia, where only a limited deficiency exists.

Vegetable crops are classified according to their tolerance to applied borax as determined by field and greenhouse studies. This classification shows that, assuming normal rates of fertilizer application, borax, at the rate of ten pounds per ton, may safely be mixed with fertilizers used for all vegetable crops grown in Eastern Virginia.

Precautions necessary for the avoidance of injury in applying borax are stressed.

On soils where any one crop is affected by boron deficiency, it is recommended that borax be applied at the rate of not more than ten pounds per acre for the following crops:

Beets	Eggplant	Potatoes
Carrots	Kale	Potatoes (sweet)
Cauliflower	Lettuce	Radish
Celery	Mustard	Tomatoes
Corn (field and sweet)	Pepper (sweet)	Turnips

NEWS LETTER

Issued by
The Maryland Vegetable Growers Association
W. R. Ballard

Secretary-Treasurer

Vol. XVIII, No. 4 College Park, Maryland April, 1941.

Edible Soybeans. The Maryland Experiment Station has just reported on the results of edible soybean trials during the season of 1940. Nine varieties were grown in rows 3 feet apart, plants standing approximately 4 inches apart in the row. The planting was done on May 29 on a sandy loam soil. An application of 600 lbs. per acre of a 5-10-5 was applied in bands on each side of the row at time of planting. The stage of maturity at harvesting time was as nearly the same for each variety as it was possible to make it. Higan was the heaviest yielder of shell beans while Emperial, Emperor and Willomi were next in order.

Samples of each variety were canned for the purpose of comparing the edible quality of the different sorts. Canning procedure furnished by the American Company was followed and 16 expert judges scored the samples as 1.- Excellent, 2.- Good, 3.- Fair, and 4.- Poor.

Factors taken into consideration were color, character of liquor, flavor, and maturity. Samples of Emperor were considerably higher in quality than any of the others. Bauser, Higan, and Giant Green were ranked second in quality and the three were not significantly different from each other. The third group included Toku, Jogun, Imperial, and Hokkaido and these were not significantly different from each other. Willomi was significantly lower in quality than any of the others.

Because of difficulties in preparing edible soybeans for cooking it is not likely that they will become popular as a garden vegetable, although they have distinct promise as a crop grown for the canneries.

New Bulletin. Growers may be interest in a new Farmer's bulletin recently issued. This is No. 1862 entitled - "Vegetable Seed Treatments". This includes a chart of 45 types of vegetables with seed treatments suitable for controlling specific diseases. Careful directions are given for preparing and using the recommended treatments.

More Tomatoes to be Grown. Claude R. Wickard, Secretary of Agriculture, has issued a call for a substantial increase in the production of tomatoes. Canneries are asked to put up an additonal 15,000,000 cases and this will involve a production of approximately 50% over last year. The Agricultural Department will undertake to buy the additonal pack at the end of the 1941 season. The price has not been set but canners are asked to submit sales offers at once.

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COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF MARYLAND

UNIVERSITY OF MARYLAND
U. S. DEPARTMENT OF AGRICULTURE
COOPERATING

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EXTENSION SERVICE

News Letter

Issued by
The Maryland Vegetable Growers Assoc.
W. R. Bellard
Secretary-Treasurer

Vol. XVIII No.5 College Park, Maryland May, 1941.

Hormones Give New Hope. An article in the May 2, 1941 Seed World is very suggestive in possibilities for the future of plant development. The work done by the Bureau of Plant Industry in spraying apples to make them stick to the trees has stimulated much activity on the part of investigators. Hormone sprays have been used on a great many plants and reports are coming in of larger harvests, better sets of fruit and even more seed.

Professor Wm. H. Eyster, according to this article, has discovered the reason for the better set of fruit. He finds that many flowers previously thought to be sel-sterile are so only because the pollen tubes grow so slowly that they do not reach the ovary before the styles deteriorate. Dr. Eyster has obtained seeds from so-called self-sterile flowers by spraying with napthyl-acetamide solution on the flowers at or just before the time pollination takes place. This is of great interest because it makes possible the use of crosses in plant breeding hitherto thought to be infertile and useless.

The cost of the spray is very low, as the spray runs 2 cents a gallon or less when Fruitone, the commercial preparation is used. At 20 gallons per acre this means a cost of 40 cents or less.

Dr. J. C. Ireland, of the Oklahoma Experiment Station, obtained a heavy set of seed on alfalfa from three sprays. Cotton gave longer staple, no boll drop and from 35% to 50% increase in yield per acre.

On both string beans and lima beans the spray has resulted in heavier set and a heavier crop. At one Experiment Station the results on lima beans were so startling that the director did not want the results published until a second year's tests could be run.

New Requirements Adopted for Potato Fields Entered for Certification. A number of new requirements for owners of potato fields entered for certification were adopted at a meeting of the Maryland Seed Certification Board on April 7, it is announced by Dr.R.A.Jehle State Plant Pathologist. Members of the Board felt the action was necessary in view of the recent introduction of new seed-borne ring rot disease into the United States.

Dr. Jehle points out that symptoms of the disease often occur so late they may not be detected by field and bin inspections. Under conditions favorable for its development ring rot may cause a loss of almost the entire potato crop.

According to the new requirements, after January 1, 1942, potato fields will not be inspected for certification unless they are grown from Maryland seed produced in a tuber unit plot or from certified seed from other states or countries produced by growers whose seed stock has been approved for certified seed production by the Maryland Seed Certification Board.

Dr. Jehle says this means that if a Maryland potato grower intends to use his own seed for planting fields in which he intends to grow certified seed in 1942, he must plant a tuber unit seed plot this year. This tuber unit field must be large enough to produce sufficient seed to plant all of the fields which he plans to enter for certification in 1942.

For further information on tuber unit planting consult your county agent or Dr. Jehle, in care of the University of Maryland, College Park, Maryland.

Cooperative Extension Work
in
Agriculture and Home Economics
State of Maryland

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News Letter
Issued by
The Maryland Vegetable Growers Assoc.
W. R. Ballard
Secretary-Treasurer

Vol. XVIII No. 6 College Park, Maryland June, 1941.

The Vegetable Situation. The May report of the U. S. Bureau of Agricultural Economics indicates that market supplies of truck crops available in May and in prospect for the early summer continue smaller than for last year, but the supplies of new potatoes are larger. Unfavorable weather - too much rain in some areas and too little in others - has reduced the yield prospects for a large number of items. As a result market prices of truck crops have shown less than the usual seasonal decline in recent weeks, and were at relatively high levels during late May. Prices of new potatoes have declined seasonally in May and in the latter part of the month averaged only slightly below prices a year earlier.

The supply of new potatoes is rapidly increasing as the important second section of early states come into full production. Carlot shipments are increasing and probably will reach a seasonal peak in June. The crop in this area is about 3 million bushels larger than in 1940. For the second early group, which markets largely in June, a smaller crop than that of last year is indicated, but the prospect is for a slightly decreased output in the first section of intermediate states. Old stock potates are continuing relatively plentiful but marketings will be completed soon.

Supplies of truck crops are increasing in volume as more northern areas come into production, but the seasonal increase this year is not as great as usual. There are prospects of larger supplies than a year earlier of some items, but these are more than offset by prospects of smaller supplies of others. The total tonnage available for market and in immediate prospect is about 1 percent below the comparable output last season.

Increased acreages of processing truck crops are being planted this season in response to the improved demand prospects and the Government's food-for-defense program.

Experiments with Pea Fertilizer Placement in Maryland. The University of Maryland, in cooperation with the U. S. Bureau of Agricultural Chemistry and Engineering has conducted for the past three years some fertilizer placement experiments with Alaska peas at the Ridgely Sub-Station. The summary and conclusions are as follows:

The results of three seasons' work show in general that greater yields of shelled peas can be expected from fertilizer drilled in a single band 1½ inches from the seed than if the same quantity of

of fertilizer is either drilled or broadcast, or if it is placed in bands 2½ or 3½ inches from the seed. The experiments on the Eastern Shore of Maryland indicate that a fertilizer containing eight or ten per cent nitrogen applied at the rate of 500 pounds per acre will give profitable returns over a four or five per cent ratio at the 1½ inch band placement. The high nitrogen ratios produced higher yields when placed near the seed than when drilled in bands 2½ or 3½ inches from the seed. It was found that in a fertilizer containing up to five per cent nitrogen, the source of nitrogen did not materially influence the yield of peas. When calcium cyanamid was the only source of nitrogen, the results showed that it would be advisable to follow the commercial practice and broadcast or drill at least half the nitrogen ahead of the planting.

It has been found that in the light soils of the Eastern Shore drilling fertilizer or even superphosphate with the seed will reduce the stand of plants, the rate or emergence, and the yield of peas. Drilling only 125 pounds of a 20 per cent superphosphate with the seed and the rest of the fertilizer in a single band reduced the yield over nine per cent, as compared with placing all the fertilizer in the band; and likewise drilling 375 pounds of superphosphate with the seed reduced the yield 38 per cent.

Stand counts of plants show that band placement close to the seed at 1½ inches did not reduce the stand with either a 5 or 10 per cent nitrogen fertilizer made of nitrate, sulphate, or cyanamid sources of nitrogen. In fact, there was an insignificant but consistent increase in stand with the closest band placement.

Neither the method of placement of fertilizer nor the ratio used materially affected the sieve sizes or the maturity date of peas.

Cooperative Extension Work
in
Agriculture and Home Economics
State of Maryland

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News Letter
Issued by
The Maryland Vegetable Growers Assoc.
W. R. Ballard
Secretary-Treasurer

Vol. XVIII No. 7 College Park, Maryland July, 1941.

Seed Law Amended. The State Seed Law was amended at the last session of the legislature, the principal change being to bring vegetable seeds under the jurisdiction of the law. In a general way regulations correspond to those recommended by the United States Department of Agriculture under the Federal Seed Act of August 9, 1939. Unlike the Federal Regulations, the Maryland Act divides vegetable seeds into two groups (a) for containers of eight ounces or more, and (b) for containers of less than eight ounces. The law provides that "Each container of vegetable seeds which is sold, offered for sale, or exposed for sale, within this State for planting purposes shall bear thereon or have attached thereto in a conspicuous place a plainly written or printed label or tag in the English language, giving the following information:

(a. For containers of eight ounces or more —
(1- Lot number or other lot identification
(2- Name of kind and variety of seed
(3- Percentage of germination, exclusive of hard seed
(4- Percentage of hard seed, if present
(5- The calendar month and year the test was begun to determine such percentages.
(6- Name and address of the person who labeled said seed, or who sells, offers or exposes said seed for sale within this State.
(b. For containers of less than eight ounces —
(1- Name of kind and variety of seed
(2- For seeds which germinate less than the standard last established by the State Board of Agriculture under this sub-title
(A. Percentage of germination, exclusive of hard seed
(B. Percentage of hard seed, if present
(C. The calendar month and year the test was completed to determine such percentages
(D. The words "Below Standard" in not less than 8-point type
(3- Name and address of the person who labeled said seed or who sells, or offers or exposes said seed for sale within this state

The law provides for seizure of seed in violation of the Act or for a "stop sale" order

One provision which vegetable growers should be interested in is the field testing of seeds. They should work for an appropriation to carry this provision into effect

The Act goes into effect January 1st, 1942.

INFORMATION ABOUT THE NATIONAL MEETING OF THE VEGETABLE GROWERS ASSOCIATION OF AMERICA, COLUMBUS, OHIO, AUGUST 4-7, 1941:

Researches, indicating the necessity of protective foods, i.e., leafy vegetables; fruits, especially the tomato; milk, butter, and whole grain cereals, have prompted the army and other governmental agencies to call for more and more vegetables. Other researches reveal that three-fourths of the nonfarm families of the United States are now getting along on diets considered poor or only fair.

This information calls for another type of research, i.e., research designed to improve the quality and reduce the cost of vegetables so that everybody can have an opportunity to consume foods that are protective and essential. This is the type of research that will be stressed during the August 4-7 convention of the Vegetable Growers Association of America, to be held at the Deshler Wallick Hotel, in Columbus, Ohio.

Commercial firms and the Ohio Division of Plant Industry are sponsoring seven fellowships at Ohio State University and outlying experiment stations to study new cultural methods of raising the highest quality vegetables at the lowest cost. The practical applications of these results which will be demonstrated at the convention will enable growers to meet many of the problems arising from the present emergency. For example, at the V.G.A. of A. banquet, August 6, a salad with seedless tomatoes will be served, while on exhibition in the University greenhouse will be seedless peppers, melons, and eggplants. Methods of producing these seedless fruits will be demonstrated.

The Ohio Division of Plant Industry has established two of these fellowships primarily to study varietal purity and yielding capacity of vegetable seeds sold in the state. Approximately 2000 varieties and strains of vegetables are to be included in the 12 test acres.

One fellow is making a detailed study on the effect of nitrogen fertilizer on the decomposition of crop refuse to increase the organic matter content of the soil. Every grower is fully aware of the need for a sufficient amount of organic matter to provide air for good root growth. This need for air around roots will be amply demonstrated both in the field and greenhouse during the convention.

A graduate student from the Home Economics Department at Ohio State University will present a paper on the effect of fertilizers on the food value of vegetables. This should be useful to producers and especially valuable to the consumer. In addition to this, the growers will view tomato fertilizer tests designed to determine the most effective method of fertilizing tomatoes for canning.

Convention guests will see 4 acres of potatoes on the University gardens, planted with the express purpose of showing differences in yield and plant growth with varying water and fertilizer applications.

Other graduate students are conducting experiments with the unusual fertilizing materials such as boron, zinc, copper, and manganese upon the quality of vegetables. Often the quality of the vegetable is affected by lack of these materials long before any growth deficiencies are noted. An elaborate display of plants showing hunger signs will be on display in the field and greenhouse during the convention.

NEWS LETTER

Issued by
Maryland Vegetable Growers' Association,
W. R. Ballard,
Secretary-Treasurer.

Vol. XVIII. No. 8. College Park, Maryland August, 1941

The Maryland Tomato Crop

In a recent survey of 228 tomato fields on the lower Eastern Shore with Mr. F. M. Shook of the Tri-State Packers' Association, the average set of fruit on the vines at this season was rated as appreciably below normal. Furthermore, late tomatoes have made very poor vine growth and a good percentage have no fruit and relatively few blossoms.

In making this survey, the fields were rated numerically from one to five, No. 1 being good and No. 5 being poor. No. 3 represented approximately average condition for a period of years. The average numerical rating at all fields was 3.56 with a grouping as follows: No. 1- 7%, No. 2 - 14%, No. 3 - 25%, No. 4 - 26%, No. 5 - 28%.

The above is merely a classification of conditions of the crop at this time, based largely on the set of fruit on the vines. No attempt was made to rate the fields according to anticipated yields. The vines in general are in better-than-average condition as regards leaf blight infection, and the early and mid-season crops have satisfactory vine growth.

With such a poor set of fruit this late in the season, it would seem that the late summer and early fall conditions would have to be unusually favorable in order to secure a normal yield.

From limited observations, it seems a somewhat similar condition exists in Western Maryland with the exception that the mid-season and early tomatoes in the north central area have set slightly better. --H. A. Hunter, Canning Crop Specialist

Field Days

Annual Vegetable Variety Field Days usually held alternately between New York and New England were held this year on August 11th and 12th at the U. S. Horticultural Station and the Maryland Experiment Station Research Farms near Beltsville, Maryland.

Starting Monday morning at 9:00 A.M. greenhouses and laboratories of the U. S. Horticultural Station were inspected. In the afternoon field plantings of tomatoes, lima beans, peppers, eggplants and peppers were examined.

In the evening a banquet was held at the University of Maryland at which Dr. B. L. Wade of the Regional Vegetable Breeding

Laboratory of Charleston, South Carolina, spoke on "The Value of Co-ordinated Vegetable Breeding Work".

On Tuesday the visitors and officials numbering about 100 persons inspected the plots of the Maryland Experiment Station. These included Tomato Source experiment, Tomato spraying and dusting experiment, Sweet Corn fertilizer placement and analysis test, Tomato fertilizer composition and placement experiment, Edible soybean test, Cucumber variety trials, Lima bean plantings, Muskmelon variety and breeding plots, Snap bean variety trials.

A specially arranged conducted tour to the Ridgely experimental Sub-Station to see cantaloupe plots and cucumber plots at Hurlock both on the Eastern Shore was scheduled for Wednesday for those who cared to make the trip.

One is impressed by the comprehensive program of vegetable breeding work carried on by these institutions. The development of disease resistance looms large in many of the projects. Distinct progress is being made. However, because of the occurrence of new organisms attacking plants, the struggle to keep ahead of pests will necessarily be a continuous performance.

Investigators now have a much better understanding of genetic make-up of plants than formerly and are better able to combine characters to bring about the desired results. It is sometimes necessary to go back to the wild to find desirable characters to combine with commercial strains. The introduction of new plants from every part of the known world is an important part of the vegetable breeding program.

NEWS LETTER

Issued by
The Maryland Vegetables Growers Association
W. R. Ballard,
Secretary-Treasurer.

Vol. XVIII. No. 8. College Park, Maryland September-October

Increased Production of Vegetables Asked For

The government is asking for increased production of food and feed materials for 1942 and goals for Maryland have been set up. The committee in charge is busily engaged in breaking these down into county goals.

The increase in vegetables for fresh consumption is placed at 5% while that of vegetables for processing is 1%. The figures for particular crops are as follows; Tomatoes for market 7%; for processing 5%; snap beans. m. 1%. p. 9%; sweet corn, p. decrease 21%; green peas, m, 14%, p. 11%; Irish potatoes, 5%; sweet potatoes, 1%; farm gardens. 32%. The figure for farm gardens is based upon a comparison with 1929 rather than with 1941 as in the other cases.

The county pictures will, of course, be quite different because the production of some of the vegetables is concentrated in restricted areas. The individual grower will have a further problem of determining how largely he should increase the production of the particular types he is growing. The problem will be complicated by difficulties in securing adequate supplies of fertilizers, fungicides and insecticides as well as such items as labor, packages, and machinery. However increases can undoubtedly be made despite the difficulties, unless the weather man lays on too heavy a hand.

Reports are not available on the effect of the late summer drouth, but it has undoubtedly curtailed seriously the yields of some of the late vegetable crops.

Irrigation for Gardens

A recent report from the Kansas Extension Service describes the use of sub-irrigation in the home garden. Many western farms have areas of approximately 50x50 feet equipped for such methods. While the expense would seem to preclude the use of this plan in commercial projects, it might have advantages for certain uses, as for example the production of plants for field planting.

The suggestion is made that a preliminary test line be laid in dry soil just below plow depth. The tile should be perfectly level and the line should be turned up at the inlet end water is run into the tile until moisture begins to appear on the surface, when the water is

cut off. Twenty-four hours should elapse before an observation ditch is dug across the line to determine how far the water has spread. In this way the proper distance between irrigation lines can be learned. Lines are laid from 3' to 5' apart depending upon the texture of the soil, but 42" is about the average distance. Lines should not be much over 50' in length unless the supply of water is abundant.

The cost for installing tile in a 50' x 50' garden was given as follows:

620 feet 4" drain tile # 2 @ 6¢	$37.20
Digging trench, laying tile, and back-filling, 3 days @ $3.00	9.00
Cement and sand for joints at inlet	2.30
Total	$48.50

For commercial use surface irrigating or the overhead system would seem to be more practical. A large supply of water must be available and for spraying systems considerable pressure is essential.

While this season has been abnormal in many respects, there is seldom a year when irrigation in some form would not be of benefit.

Export Vegetables

Under present conditions Canada is the principal export market for fresh vegetables. Lettuce, tomatoes, celery, carrots and potatoes are the principal items shipped vegetables of excellent quality are produced by the neighbor to the north of us but the shortness of their season, makes it impossible to keep up a constant supply of fresh vegetables. The value of the vegetables annually exported to Canada is reported as over four million dollars.

Canadian exports of fresh fruits and vegetables to the United States, averaging 2.2 million dollars in the most recent 5-year period consisted largely of vegetables. Potatoes and rutabagas were the principal vegetables exported.

Annual Meetings

The plan of having round table discussions at the annual meetings has seemed to work out very well in the last two years. This scheme will probably be continued in the sessions next January. In order to work satisfactorily it is essential to have live up-to-date subjects for discussion and it is here that the members can be of distinct help in formulating the program. What are some of your problems? Do you have any pet peeves? How can the vegetable groups contribute to the support of defense projects? How can the agricultural labor shortage be relieved? These and many other questions may have an important bearing on the future of the vegetable producing groups.

One disadvantage to the discussion plan is that it is sometimes difficult to glean much of value for the annual report. Growers should make it a point to come to the meeting with some worth-while contribution to the discussions. It is particularly desirable to have first hand accounts of actual experiences. What have been your successes and failures with specific crops? How did you solve your labor problems? What were your marketing difficulties? Of particular interest would be successful methods of coping with the long dry season.

A little note to the Secretary giving your suggestions for the program will be appreciated.

NEWS LETTER

Issued by
The Maryland Vegetable Growers Association
W. R. Ballard,
Secretary-Treasurer

Vol. XVIII, No 11 College Park, Maryland November 1941

Certified Potatoes

Dr. R. A. Jehle has just released figures on the available stocks of white potato and sweet potato certified stocks produced in Maryland during the past year Three hundred and forty-four acres representing 101 growers were inspected. Of these some two hundred or more acres are eligible for certification, the yield amounting to 21,193.75 bushels. The varieties represented are Sequoia, Smooth Rural. Russet Rural, Irish Cobbler, Sebago. Katahdin, and Dakota Red. These are distributed through the following counties; Garrett, Howard, Prince Georges, Somerset, Wicomico, and Worcester. Any one desiring to purchase stock should get in touch with the county agents in these counties. A list of the growers having stock eligible for certification will be sent on application.

Total acreage of sweet potatoes eligible for certification was 32.25 with a total yield of 9450 bushels. This represents the production of eleven growers. The bulk of this production is Maryland Golden and the counties represented are Wicomico and Worcester.

The dry weather cut the yield of some of the later varieties seriously. Some of the newer varieties seem better able to endure dreuth than the older varieties. Because of the limited supply of some varieties growers should get their orders in early.

Mushroom Culture

According to Farmer's Bulletin No. 1875, Mushroom Growing in the United States rapid strides have been made in this industry during the past quarter century, both in point of total production and of refinements in cultural practice. The canning of mushrooms has increased in recent years until at the present time mushroom soup is one of the best sellers of the nationally advertised brands. There are several hundred commercial growers; their total production is about 35,000,000 pounds. Centers of production have sprung up near most of the large cities where the climate is suitable.

This development, however, should not be interpreted as indicating that mushroom growing is a profitable venture for the inexperienced. All phases of the industry have become highly competitive, and the low prices prevailing in most markets make it necessary to obtain an average yield of nearly 1 1/2 pounds per square foot of bed space in order to cover expenses. To obtain yields of this amount consistently requires a thorough knowledge of the complex cultural practice and skill in following out this practice which can be developed only through long experience.

Schedule of Classes for State Vegetable Exhibit. Lord Baltimore Hotel, Baltimore, Maryland, January 6, 7, 8th, 1942

Sponsored by the Maryland Vegetable Growers Association.

General Rules

Exhibits may be entered only by growers and only one entry may be made in each class.

No entry fee will be charged. One dollar will be extracted from premiums for membership in the Maryland Vegetable Growers Association.

Exhibits should be sent to prepaid express or parcel post to the State Vegetable Exhibit, Lord Baltimore Hotel, c/o W. R. Ballard, Baltimore, Maryland, and should arrive not later than January 6th. Judging will begin at 10:00 a.m. on January 7th and no entries will be received after that time.

Arrangements for return of exhibits must be made by the exhibitors, otherwise the exhibits will be disposed of by the Maryland Vegetable Growers Association.

Premium List

Class 1. Best 3 heads cabbage, Flathead type — 1st. $4.00; 2nd $3.00; 3rd. $2.00.

Class 2. Best 3 heads cabbage, Ballhead type — 1st. $4,00; 2nd $3.00; 3rd. $2.00.

Class 4. Best 16 yellow onions — 1st, $4.00; 2nd. $3.00 3rd, $2.00.

Class 8. Best 12 carrots, any variety — 1st, $4.00; 2nd, $3.00; 3rd, $2.00.

Class 10. Best 12 parsnips — 1st. $4.00; 2nd. $3.00 3rd. $2.00.

Class 11. Best 16 turnips — 1st. $4.00; 2nd. #3.00; 3rd. $2.00.

Class 13. Best 3 Hubbard squash, any type — 1st. $4.00; 2nd. $3.00; 3rd. $2.00.

Class 15. Best 2 three pound baskets of mushrooms — 1st. $4.00; 2nd. $3.00; 3rd. $2.00.

NEWS LETTER

Issued by
The Maryland Vegetable Growers Association
W. R. Ballard,
Secretary-Treasurer

Vol. XVIII, No 12 College Park, Maryland December 1941

The Annual Meetings

In the swirl of world events the vegetable grower assumes major importance. The government is asking for large increases in certain products. Patriotism demands unnsual effort in the coming year. More than usual difficulties will attend these efforts. Scarcity of seeds, fertilizers, and tools, to say nothing of the complicated labor situation will appear as bottlenecks. Under these circumstances, it is imperative that growers have a thorough understanding of what is expected of them. Their experience and judgment should be brought to bear on the problems in order to insure an intelligent and satisfactory solution.

The Maryland Vegetable Growers Association should take the lead in this movement and every member, every officer, and related groups should make an especial effort to get the influential growers to attend the annual meeting in Baltimore on Wednesday, January 7th to review the situation and to take concerted action to bring about the desired results.

The program has been set up in such a way that it is hoped it will lead to informed discussion and constructive action.

By joining with the Horticultural Council in the afternoon session an apportunity will be afforded for all horticultural interests to have their say. Relations with governmental agencies will be of critical significance and growers will have many questions to ask regarding knotty problems. Growers are as patriotic as any other group, but they will want assurances that they will get as good a break as other groups in the sacrifices they are asked to make.

County agents and other agricultural leaders are urged to see that all counties which have important horticultural producing areas have delegations present to look after their interests.

An effort is being made to have responsible government officials in attendance to give authoritative information and to answer questions of moment.

This is your opportunity to thrash out these problems and to crystallize your thoughts for effective action. Look over the program carefully and come prepared to enter fully into the discussions.

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